

ABSTRACT OF DISCLOSURE

Disclosed is a heat resistant alloy for exhaust valves, in which Ni-content is constrained to at maximum 62% due to the material cost, while the strength is maintained equal or better to those of conventional alloys and the strength is kept even after use at high temperature for a long period of time. The alloy has the composition essentially consisting of, by weight %, C: 0.01-0.2%, Si: up to 1.0%, Mn: up to 1.0%, P: up to 0.02%, S: up to 0.01%, Ni: 30-62%, Cr: 13-20%, W: 0.01-3.00%, Mo: up to 2.0%, provided that $Mo+0.5W: 1.0-2.5\%$, Al: 0.7% or higher and less than 1.6%, Ti: 1.5-3.0%, Nb: 0.5-1.5%, B: 0.001-0.010%, provided that $[\%Ti]/[\%Al]: 1.6$ or more to less than 2.0, and the balance of Fe and inevitable impurities. Optional components are I) at least one of Mg: 0.001-0.030%, Ca: 0.001-0.030% and Zr: 0.001-0.100%, II) Cu: up to 2.0%, and III) V: 0.005-1.00%.